

WHAT IS CLAIMED IS:

1. Method for printing a substrate with ink drops according to the “drop-on-demand” principle, which substrate is provided with a polymeric ink-receiving layer, using an ink jet printing device, the printhead of which is provided with a piezo element for generating ink drops, the method comprising the steps of supplying the substrate, generating ink drops and depositing the generated ink drops on the substrate, wherein the ink from which the ink drops are formed, has an ink composition which comprises a dye, water, a lower alcohol and humectant, wherein the lower alcohol content is 5-30% by weight.
2. Method according to claim 1, wherein the lower alcohol is selected from the group consisting of monohydric alcohols having 1-4 carbon atoms.
3. Method according to claim 1, wherein the lower alcohol comprises isopropanol.
4. Method according to claim 1, wherein the humectants comprise one or more polyhydric alcohols, polyethylene glycols, or polypropylene glycols.
5. Method according to claim 1, wherein the humectant : lower alcohol weight ratio is between 0.10 and 1.50.
6. Method according to claim 5, wherein the lower alcohol : water weight ratio is between 0.08 and 0.6.
7. Method according to claim 6, wherein the substrate comprises a polymeric ink-receiving layer made from a swelling polymer.
8. Ink composition, particularly suitable for the method according to one of the preceding claims, wherein the ink composition comprises a dye, water, lower alcohol and humectant, the lower alcohol content thereof being 5-30% by weight.

9. Ink composition according to claim 8, wherein the ink has a viscosity greater than 3 cP.